

A photograph of the Space Shuttle Columbia on the launch pad, being mated to the External Tank and Solid Rocket Boosters. The orbiter is being moved by a crawler-transporter. The shuttle is white with black and grey markings. The launch pad structure is visible on the left, and a large plume of smoke is at the bottom. The background is a clear blue sky.

Celebrating 20 Years and 100 Flights of the Space Shuttle

It's hard to believe that a whole generation has come of age since the shuttle first flew. There was tremendous excitement when *Columbia*, STS-1, the first reusable orbiter to fly in space, was launched from Cape Canaveral on April 12, 1981, piloted by NASA astronauts John Young and Robert Crippen.

Now more than 20 years and 100 flights later, the space shuttle fleet's four vehicles – *Columbia*, *Discovery*, *Atlantis* and *Endeavour* – comprise the world's primary reusable system for reliable human space travel. Since that first launch, space shuttles have supported the Mir and International Space Stations; maintained the Hubble Space Telescope and other satellites; launched several planetary spacecraft; and staged hundreds of experiments in orbit.

Even with its record of accomplishments, the shuttle fleet is in the early stages of operational life. Each orbiter has a structural design life of at least 100 missions, and the most flown of the four has only expended about 30% of its life. With thousands of upgrades already in place and more improvements planned, the shuttle fleet will likely be flying well into the next decade.



On this historic anniversary of the first Moon walk, it's a real honor for the integrated shuttle and station crews – along with the flight control teams – to usher in a new era of space-walking from the International Space Station.

Michael Gernhardt, STS-104,
upon opening the Quest airlock
for the first time